

CLAIMS

1. A method for assessing the susceptibility of an individual to treatment of an inflammatory disease with fish oil, comprising determining the genotype of the individual in relation to polymorphisms at the TNF- $\alpha$  -308, LT- $\alpha$  +252 and/or IL-6 -174 alleles; and inferring therefrom whether said individual responds well to treatment with fish oil.
2. A method according to claim 1, further comprising determining the inherent TNF- $\alpha$  status of the individual.
3. A method according to claim 1 wherein the genotype at the LT- $\alpha$  +252 and IL-6 -174 alleles is determined.
4. A method according to claim 1 or 2 wherein the genotype at the LT- $\alpha$  gene is heterozygous TNFB1/2.
5. A method according to claim 1 or 2 wherein the genotype at the IL-6 gene is homozygous GG.
6. A method according to claim 1 or 2 wherein the genotype at the LT- $\alpha$  and IL-6 genes is heterozygous TNFB1/2 and IL-6 GG respectively.
7. A method of assessing the susceptibility of an individual to treatment of an inflammatory disorder with fish oil, comprising:
  - a) determining the inherent TNF- $\alpha$  status of the individual;  
and
  - b) determining the genotype of the individual in relation to polymorphisms at the TNF- $\alpha$  -308, LT- $\alpha$  +252 and/or IL-6 -174 alleles; and

inferring therefrom whether said individual responds well to treatment with fish oil.

8. A method for the treatment of an inflammatory disease in a patient, which comprises assessing the susceptibility of an individual to treatment of an inflammatory disease with fish oil, said assessment comprising:

a) determining the genotype of the individual in relation to polymorphisms at the TNF- $\alpha$  -308, LT- $\alpha$  +252 and/or IL-6 - 174 alleles; and

b) inferring therefrom whether said individual responds well to treatment with fish oil; and

treating said individual with an appropriate amount of fish oil.

9. A method according to claim 8 further comprising determining the inherent TNF- $\alpha$  status of the individual.

10. A method according to any one of claims 1 to 9 in which the inflammatory disorder is selected from the group consisting of an inflammatory skin disorder, Perianal Crohn's disease or arthritis.